

## INDEXING AND FILING METHODS FOR THE MICROSCOPIST

Text:—The next best thing to knowing a thing is to know where it can be found when wanted.

Application of the above text by an amateur Microscopist:

I. *Filing Brief Articles.*

The amateur, especially if he is working alone, groping in the dark, as it were, must depend upon what has been done by others for his start and early ideas, to a great extent, and this knowledge must be gained from their published work usually. A great deal of this work was done during the years 1840 to 1880, when the "battle of the lenses" was waged, and great interest was taken in the resolution of the markings on diatoms, etc. Great interest was also taken in general microscopy during this period and the results are found in the papers, periodicals, etc., published on the subject during that time.

The writer endeavors to obtain as many of these periodicals, etc., as possible, and after looking them over removes the pages containing such articles as he wishes to preserve. If an article occupies two or more leaves they are kept together by placing three "dabs" of mucilage near the top edges and pressing them together. These articles are then filed and indexed by the vertical filing system. Excellent equipment for this system can be purchased, but they are quite expensive, and the plan adopted by the writer is as follows: Folders are made from sheets of Manila paper heavy enough to stand alone and  $17\frac{1}{2}$  inches long by 13 inches wide, which are folded so that one end projects  $\frac{1}{2}$  inch beyond the other. This projecting end is then cut so as to leave a tab on which to write the subject of the contents of the folder. These tabs have a length equal to one-third the width of the folder, which is 13 inches. Part of the folders have this tab located in the middle of its width, part of them have it even with the left hand edge and the remainder have it even with the right hand edge. We now have vertical folders 13 inches wide by  $8\frac{1}{2}$  inches deep, with a half inch tab on the top edge.

Twenty-six of the folders having the tabs even with the left hand edge are then marked with a letter of the alphabet and stood on

edge in a drawer or box  $9\frac{1}{2}$  inches deep by 14 inches wide and as long as the user wishes.

The articles taken from the periodicals are now placed in the folders according to their subject matter, which is written on the tabs. The folders are now arranged behind their proper alphabetical index folders first placed in the drawer. These index folders act as alphabetical guides and in them is also placed articles on a subject which at first may not seem of sufficient importance to call for a separate folder.

In cutting out articles from periodicals, etc., as above described there will be cases where the last page of the last leaf of the article clipped contains the beginning of an article on another subject which it is also desired to keep. In this case the writer proceeds as follows: The most important article is given the preference and filed in the proper folder, then in the folder having the tab bearing the subject of the other article is placed a sheet on which is written the title of the second article and a note to the effect that it is on back of such an article—naming the title of the first article. In this way cross references can also be made, so that it makes a very complete system. There is no pasting required, except the “dabs” spoken of above; the contents are already indexed when the folders are properly placed, so no card index is necessary and the space occupied is limited only by the size and number of boxes or drawers called for.

While the above sounds complicated, it is in fact very simple; the secret of satisfaction with it lies in filing material away as fast as it collects rather than allowing a lot to collect before placing it in the folders.

The writer uses the above method for pamphlet, specimen pages and reviews of books, photographs, sketches; in fact, anything of that character can be placed in the file and readily referred to.

## 2. *Card Index for Notes.*

The writer also makes great use of the card index and is a firm believer in its value in nearly every profession. The regular size cards, 3x5 inches and 4x6 inches, are the ones used, with arrangement of rulings to suit the case.

## CARD "A"

Zoo.	Zoology
375	An Introduction to Zoology.
	R. W. Hegner (Univ. of Mich.)
	Macmillan Co., N. Y.
	Oct. 1910. 8 vo.-ils.-cloth-425 pgs.-1 vol.
	\$2.50 net.

In order to show the working of the system as used by the writer we will assume that a catalogue or notice has been received from an agent or publisher regarding a book on Zoology. The book is entered on card "A" for future reference. Later on the book is purchased and entered on card "B," being given the number 375, which is the next consecutive number under "Bibliography," which comprises all books, periodicals, papers, and everything of a like nature in which the writer is interested or has brought to his notice. The number 375 is merely for use in referring to matter in that book and is now entered on card "A," as shown.

## CARD "B"

Bib.	Bibliography
370	
371	
372	
373	
374	
375	An Introduction to Zoology—Hegner.
376	
377	
378	
379	

Cards "A" and "B" form an index on Bibliography and if desired a third card may be used which would be an author's index, for the purpose of keeping all of the writings of an author together and on which the entry would be as follows:

Hegner, R. W.

375—An Introduction to Zoology.

Other works or papers by Hegner being added as they appear from time to time.

We will say in perusing the book we found a description of the odontophores of mollusks and directions for preparing and mounting them, and, wishing to make a note of it, we fill out card "C," the "No. 375, page 253," indicating the reference and page on which the information is found. The writer uses card "C" in a card index of notes on technique, general information, etc., and it is of great use if it is desired to compose a paper or anything of that sort on a certain subject.

## CARD "C"

Odo.	Odontophores
	(Here follows such notes, etc., as is desired
	for this place, the numbers (375) giving the
	reference, where more complete informa-
	tion may be found if desired.....
	.....375 page 253)

Later on we find a mollusk and, wishing to prepare a slide, refer to card "C," and the result is card "D," on which is filled in the information indicated. The number 750.375 is a system of classification similar in principle to the Dewey classification of literature, applied to this subject. The integral part of the number showing whether it belongs to the animal, vegetable or mineral kingdom, also the particular division of the kingdom, and the decimal part showing which part of the system it relates to—nervous, circulatory, etc.—in case it is of the animal kingdom.

## CARD "D"

750. 395	Odontophore—(Name of Mollusc)	
Kill	Medium	Directions—duration, notes, etc.
Fix.		
Wash		
Stain		
Harden		
Dehud.		
Imbed		
Clear		
Mount.		
Section thickness	Cover glass thick: Date.....	

One frequently runs across information when away from home and laboratory so that it is necessary to make notes and transcribe them to cards upon arrival home. To overcome this, the writer, instead of using the ordinary notebook, uses the "National Simplex Memorandum Book No. 4450," partly filled with quadrille ruled leaves for ordinary notes, sketches, etc., which is for temporary use. The remainder of the filling consists of 3x5 inch index cards perforated to match the regular fillers. The necessary notes, sketches, etc., are made on these cards, which are placed in the regular indexes upon arrival home and fresh ones placed in the memorandum book. He also uses a similar book, No. 4480, for the 4x6 inch cards and finds this system of keeping notes very satisfactory indeed; far better than the bound notebooks.

The professional will probably condemn all of the above as being too complicated and requiring too much valuable time, and it would be quite a task for him to file and index the material he has collected during a number of years of professional life, although it would be well worth the trouble.

If the beginner will adopt the above system or such modification of it as best meets his wants he will never regret it and every year adds to its value to him.

In order to show how the value of the system may be more fully realized let us assume that it has been quite generally adopted by others interested in Microscopical work and that the writer runs across some subject requiring special technique or processes with which he is not very familiar. He applies to the society of which he may be a member, or to friends interested in a similar line of work, for information on the subject. They look over their indexes and, finding the object sought, make out a copy of their cards and send to him. He uses the information and places the card in his index for future reference. If they do not find the actual information on their cards, they may find a reference in their index of "Bibliography" as per cards "A" or "B," which will tell the inquirer where the information may be found.

Such an interchange of card index information would prove of mutual benefit to fellow-workers and especially isolated workers like the writer.

GEO. H. MARR,  
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